

REMARKS

Claims 1-4, 7, 10, 11, 16-20, 31-33, 43, 53, 56, and 58-61 have been rejected under 35 U.S.C. § 102(b) as being anticipated by Jackson (U.S. Patent 5,980,523).

"[A]n invention is anticipated if the same device, including all the claim limitations, is shown in a single prior art reference. Every element of the claimed invention must be literally present, **arranged as in the claim.**" [emphasis added] *Richardson v. Suzuki Motor Co. Ltd.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The claims must not be treated as "mere catalogs of separate parts, in disregard of the part-to-part relationships set forth in the claims and that give the claims their meaning." *Lindemann Maschinenfabrik GMBH v. American Hoist and Derrick Company et al.*, 730 F.2d 1452, 1459, 221 USPQ 481, 486 (Fed. Cir. 1984). As a result, a reference that coincidentally lists features of a claim without describing the claimed arrangement, relationship, and organization of such features cannot anticipate.

Independent claim 1 has been amended to include the feature of the first aperture including an upper portion formed having a lobed shape. In addition, the first rod connector includes a first shaft having a lobe extending laterally from an end of the first shaft and displaced axially along the first shaft from the first rod engaging portion. The first shaft and the lobe are slideably received within the first aperture such that the lobe passes through the lobed shaped portion of the first aperture and upon rotation of the first rod connector the lobe prevents the first rod connector from being removed from the first aperture of the interconnection element. Jackson does not disclose this feature and as such, for the reasons set forth below, Jackson does not anticipate Applicant's claimed invention.

Jackson discloses a knurled rotating link 104 that is positioned within an ovate opening 138 of a locking pivot mount 103. The knurled rotating link 104 is held in position within the locking pivot mount 103 through the use of a set screw 20. Without the screw 20, the knurled rotating link 104 is capable of freely traveling in and out of the locking pivot mount 103 regardless of its orientation within the locking pivot mount 103. The knurled rotating link 104 includes knurls that engage knurls on the lateral connector 102 when the cross-connector assembly is assembled. As such, Jackson does not disclose the use of a first rod connector having a lobe extending laterally from an end of a first shaft of the rod connector assembly. Further, Jackson does not disclose an interconnection element that includes an aperture having an

upper portion formed having a lobed shape such that lobe of the first rod connector is capable of passing through the first aperture and upon rotation of the first rod connector the lobe prevents the first rod connector from being removed from the first aperture. Again, the knurled rotating link 104 of Jackson can freely travel in and out of ovate opening 138 unless set screw 20 is used to secure it within the locking pivot mount 103. As such, since the above-referenced features are entirely missing from Jackson, Applicant respectfully requests the Examiner to withdraw the rejection of independent claim 1.

Yet other claims dependent from independent claim 1 are allowable and not anticipated by Jackson. For example, dependent claims 17 and 18 include the features of the first rod connector being rotatable about an axis defined by the first shaft. Rotation of the first rod connector induces the lobe to contact the first body and inhibit removal of the first shaft from the first aperture. Again, Jackson's knurled rotating link 104 does not include a lobe that contacts the locking pivot mount 103 to prevent the knurled rotating link 104 from being removed from the locking pivot mount 103. Set screw 20 prevents the knurled rotating link 104 from being removed from the locking pivot mount.

Dependent claim 31 includes the features, amongst others, of the first rod engaging portion comprising a hook that extends laterally in a first direction and wherein the lobe extends laterally from the first shaft in the first direction. Jackson does not include a lobe that extends in the same direction as the hook of the rod engagement member. As set forth above, cross-link connector disclosed in Jackson does not include a lobe on an end of the first shaft it discloses a knurled rotating link 104. Dependent claim 33 has been amended to include the feature of the first shaft having a smooth exterior surface. Again, the rotating link 104 disclosed in Jackson is knurled and does not contain any smooth surfaces and as such, Jackson does not anticipate Applicant's claimed invention.

Independent claim 43 has been rejected as being anticipated by Jackson. Independent claim 43 claims a method of treating a spinal defect utilizing the assembly set forth in independent claim 1. As set forth above, Jackson does not anticipate independent claim 1 and as such, Applicant believes that independent claim 41 is allowable for the reasons independent claim 1 is allowable.

Independent claim 53 has been rejected as being anticipated by Jackson. Independent claim 53 includes the features of the first spinal rod including a first shaft that has a projection at an end of the proximal portion. The projection is able to move through the aperture of the interconnection element when the shaft is in a first orientation with respect to the aperture and is unable to move through the aperture when the shaft is in a second orientation with respect to aperture different from the first orientation. In order to anticipate, Jackson must literally disclose every element of the claimed invention, arranged as in the claim. Regardless of the orientation of the knurled rotating link 104 disclosed in Jackson, it is capable of travelling in and out of the ovate opening 138. Set screw 20 is used to secure rotating link 104 within pivot mount 103. Jackson does not include a projection that prevents the first shaft from moving through the ovate opening when placed in a different orientation. As such, since Jackson does not disclose, teach or suggest this feature, Applicant respectfully requests the Examiner to withdraw the rejection of independent claim 53 as being anticipated by Jackson.

Independent claim 58 has been rejected as being anticipated by Jackson. Independent claim 58 claims a method of treating a spinal defect utilizing the assembly set forth in independent claim 53. As set forth above, Jackson does not anticipate independent claim 53 and as such, Applicant believes that independent claim 58 is allowable for the reasons independent claim 53 is allowable.

Claims 44, 45, and 47-52 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Fiz (U.S. Patent 6,083,226) in view of Shluzas (U.S. Patent 6,554,832). "In rejecting a claim under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness." *In re Rijckaert*, 9 F.3d 1531, 1532 (Fed. Cir. 1993). A *prima facie* case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d 781, 783 (Fed. Cir. 1993). A seminal case directed to application of 35 USC §103 is *Graham v. John Deere*, 383 U.S. 1, 148 USPQ 459 (1966). From this case, four familiar factual inquiries have resulted. The first three are directed to the evaluation of prior art relative to the claims at issue, and the last is directed to evaluating evidence of secondary considerations. *See also KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1734, 82 USPQ2d 1385, 1391 (2007) ("While the sequence of these questions might be reordered in any particular case, the [Graham] factors

continue to define the inquiry that controls."). Additionally, "rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F. 3d 977, 988 (Fed. Cir. 2006) cited with approval in *KSR*.

Obviousness also requires a suggestion of all the elements in a claim. *CFMT, Inc. v. Yieldup Int'l Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003). Further, there must be "a reason that would have prompted a person of ordinary skill in the relevant field to combine elements in the way the claimed new invention does." *KSR Int'l Co.*, 127 S.Ct. at 1741. It is impermissible to use the claimed invention as an instruction manual or "template" to piece together isolated disclosures and teachings of the prior art so that the claimed invention may be rendered obvious. *Ex parte Haymond*, 41 U.S.P.Q. 2d 1217, 1220 (B.P.A.I. 1996). The Examiner has the initial duty of supplying the factual basis for the rejection that he/she advances and the Examiner may not, because he/she doubts that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in the factual basis. *Id.*, citing *In re Warner*, 379 F.2d 1011, 1017 (CCPA 1967), *cert. denied*, 389 U.S. 1057 (1968).

Independent claim 44 has been amended to include the features of, amongst others, an interconnection element having a third body that includes a third aperture for receiving a portion of the first shaft and a stud protruding upwardly from the third body. Fiz and Shluzas do not disclose an interconnection element having a third body and a stud protruding upwardly from the third body. Further, Fiz and Shluzas do not disclose an insert positioned over the stud having a lower surface configured to engage the first shaft of the first rod connecting member extending through the third aperture and an upper portion positioned in the first aperture of the second body. Since Fiz and Shluzas do not disclose all of the features of independent claim 44, this claim is not rendered obvious over the combination of Fiz and Shluzas.

Dependent claim 45 was also as being obvious in view of Fiz and Shluzas. Dependent claim 45 has been amended to include the feature of the insert including a slit along a vertical axis. Neither Fiz or Shluzas disclose an insert that includes a slit running along a vertical axis. As such, dependent claim 45 is believed to be allowable. Since independent claim 44 is believed to be allowable in its present form, all other claims dependent therefrom are also believed to be allowable and Applicant respectfully requests reconsideration of these respective claims.

RESPONSE TO FINAL OFFICE ACTION

App. Ser. No. 10/695,067

Atty. Dkt. No. MSDI-1002

Page 14 of 16

Independent claim 52 has been rejected as being obvious over Fiz in view of Shluzas. Independent claim 52 claims a method of treating a spinal defect utilizing the assembly set forth in independent claim 44. As set forth above, Fiz and Shluzas do not render Applicant's claimed invention obvious and as such, Applicant believes that independent claim 52 is allowable for the reasons independent claim 44 is allowable.

Dependent claim 62 has been rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Crozet et al. (U.S. Patent 6,217,578) in view of Jackson and Troxell et al. (U.S. Patent 7,137,986). Dependent claim 62 has been amended to include the features of the interconnection element including a pair of flanges that extend outwardly diametrically opposite each other circumferentially about an external surface of the first body. The second body includes a pair of internal flanges in the second aperture. The flanges of the interconnection element allow the flanges of the second body to pass through gaps between the flanges of the interconnection element during assembly and upon rotation of the second body the flanges of the interconnection element engage the flanges of the second body. Troxell et al. discloses a cap screw 70 that includes a retaining ring 78 that has slits 80 at the lower portion of the retaining ring 78. The slits 80 allow the retaining ring 78 to flex inward to be inserted through a collar 82 in second hole 68. Troxell et al. does not disclose flanges of an interconnection element that allow the flanges of the second body to pass through gaps between the flanges of the interconnection element during assembly and upon rotation of the second body the flanges of the interconnection element engage the flanges of the second body. As such, since this feature is not disclosed by Troxell et al., Applicant's claimed invention is not rendered obvious over the combination of these references.

The remaining rejections in the Office Action are directed to dependent claims that are dependent from allowable independent claims. As such, based on the foregoing amendments and remarks, Applicant has rendered these rejections moot. To that end, Applicant respectfully requests reconsideration of these respective claims.

In view of the above amendments and remarks, it is respectfully submitted that the present application is in condition for allowance. If the Examiner feels that any issues remain, the Examiner is requested to contact the Applicant's undersigned representative by telephone.

Respectfully submitted,



Dean E. McConnell, Atty. Reg. No. 44,916
KRIEG DEVAULT LLP
One Indiana Square, Suite 2800
Indianapolis, IN 46204
Phone: (317) 238-6332
Facsimile: (317) 636-1507